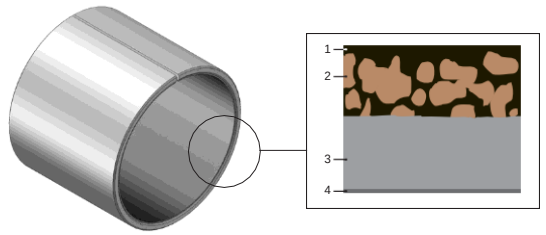
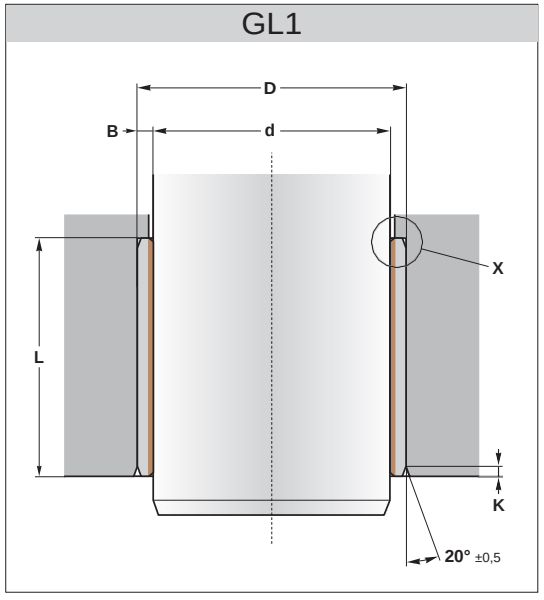
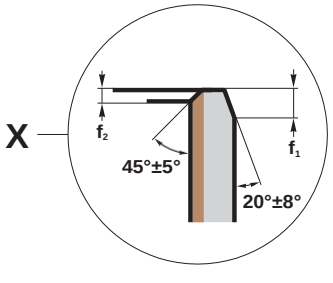


1 Modified PTFE: 0,01 -0,05 mm
2 Sintered bronze layer: 0,20 - 0,35 mm
3 Steel roll
4 Surface protection: ~0,002 mm





D	K
< 50	0,8 ±0,3
50 < 150	1,5 ±0,5
> 150	2,5 ±1

B	f1	f2
0,75	0,5	0,25
1	0,6	0,3
1,5	0,6	0,4
2	1,2	0,4
2,5	1,8	0,6

Tolerances			
	d	**D**	**L**
d ≤ 4	h6	H6	± 0,25
4 < **d** < 80	f7	H7	
d ≥ 80	h8	H7	

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Maximum load	
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Static	250 N/mm²
Maximum speed	
Dry	2,5 m/s
In hydrodynamic working	5 m/s
PV-factor	
Continuously	1,8 N/mm². m/s
Temporarily	3,6 N/mm². m/s
Shaft roughness	Ra < 0,4 µm
Shaft hardness	HB > 350

Advantages

For dry and maintenance-free applications
Absorption of noise and vibrations
Hydrodynamic applications possible
High loads
Good chemical resistance
Low wear and friction
No stick-slip
High temperature range
High sliding speed
No water absorption
Low clearance during operation
Limited dimensions

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Friction coefficient	p N/mm²	v m/s
0,025	250-140	< 0,001
0,04-0,07	140-60	0,001-0,005
0,07-0,1	60-10	0,005-0,05
0,1-0,15	10-1	0,05-0,5
0,15-0,25	< 1	0,5-2

d	D	L	Reference
3	4,5	3	**GL1 0303**
	4,5	4	**GL1 0304**
	4,5	5	**GL1 0305**
	4,5	6	**GL1 0306**
4	5,5	3	**GL1 0403**
	5,5	4	**GL1 0404**
	5,5	5	**GL1 0405**
	5,5	6	**GL1 0406**
	5,5	8	**GL1 0408**
	5,5	10	**GL1 0410**
5	7	4	**GL1 0504**
	7	5	**GL1 0505**
	7	8	**GL1 0508**
	7	10	**GL1 0510**
6	8	4	**GL1 0604**
	8	5	**GL1 0605**
	8	6	**GL1 0606**
	8	7	**GL1 0607**
	8	8	**GL1 0608**
	8	10	**GL1 0610**
7	9	5	**GL1 0705**
	9	7	**GL1 0707**
	9	10	**GL1 0710**
8	10	4	**GL1 0804**
	10	5	**GL1 0805**
	10	6	**GL1 0806**
	10	7	**GL1 0807**
	10	8	**GL1 0808**
	10	10	**GL1 0810**
	10	12	**GL1 0812**
9	11	10	**GL1 0910**

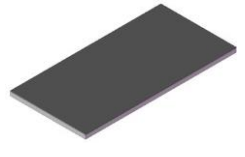
d	D	L	Reference
10	12	6	**GL1 1006**
	12	7	**GL1 1007**
	12	8	**GL1 1008**
	12	10	**GL1 1010**
	12	12	**GL1 1012**
	12	15	**GL1 1015**
	12	20	**GL1 1020**
12	14	6	**GL1 1206**
	14	7	**GL1 1207**
	14	8	**GL1 1208**
	14	9	**GL1 1209**
	14	10	**GL1 1210**
	14	12	**GL1 1212**
	14	15	**GL1 1215**
	14	18	**GL1 1218**
	14	20	**GL1 1220**
	14	25	**GL1 1225**
13	15	8	**GL1 1308**
	15	10	**GL1 1310**
	15	15	**GL1 1315**
14	16	10	**GL1 1410**
	16	12	**GL1 1412**
	16	15	**GL1 1415**
	16	20	**GL1 1420**
	16	25	**GL1 1425**
15	17	8	**GL1 1508**
	17	10	**GL1 1510**
	17	12	**GL1 1512**
	17	15	**GL1 1515**
	17	20	**GL1 1520**
	17	25	**GL1 1525**

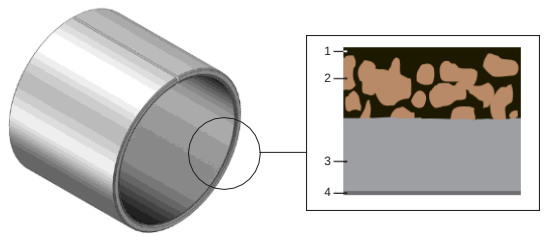

GL1 F

On request


GL1 SF

On request


GL1 P



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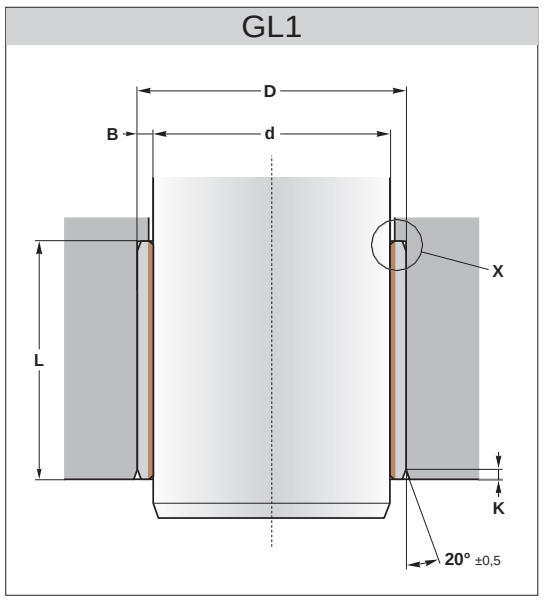

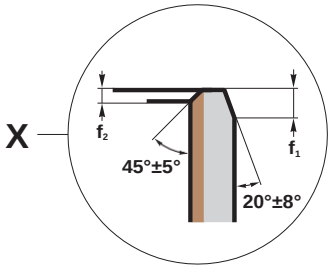

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B	f1	f2
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1,5	0,6	0,4
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Tolerances			
	d	D	L
d ≤ 4	h6	H6	± 0,25
4 < **d** < 80	f7	H7	
d ≥ 80	h8	H7	

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Shaft hardness	HB > 350

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No stick-slip
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0,07-0,1	60-10	0,005-0,05
0,1-0,15	10-1	0,05-0,5
0,15-0,25	< 1	0,5-2

d	D	L	Reference
16	18	10	**GL1 1610**
	18	12	**GL1 1612**
	18	15	**GL1 1615**
	18	20	**GL1 1620**
	18	25	**GL1 1625**
17	19	12	**GL1 1712**
	19	15	**GL1 1715**
18	20	10	**GL1 1810**
	20	12	**GL1 1812**
	20	14	**GL1 1814**
	20	15	**GL1 1815**
	20	20	**GL1 1820**
	20	25	**GL1 1825**
20	23	5	**GL1 2005**
	23	10	**GL1 2010**
	23	12	**GL1 2012**
	23	15	**GL1 2015**
	23	20	**GL1 2020**
	23	25	**GL1 2025**
	23	30	**GL1 2030**
22	25	10	**GL1 2210**
	25	12	**GL1 2212**
	25	15	**GL1 2215**
	25	20	**GL1 2220**
	25	25	**GL1 2225**
	25	30	**GL1 2230**
24	27	15	**GL1 2415**
	27	20	**GL1 2420**
	27	25	**GL1 2425**
	27	30	**GL1 2430**

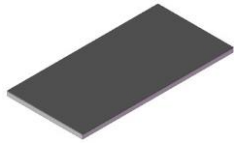
d	D	L	Reference
25	28	5	**GL1 2505**
	28	10	**GL1 2510**
	28	12	**GL1 2512**
	28	15	**GL1 2515**
	28	20	**GL1 2520**
	28	25	**GL1 2525**
	28	30	**GL1 2530**
	28	35	**GL1 2535**
	28	40	**GL1 2540**
	28	50	**GL1 2550**
26	30	15	**GL1 2615**
	30	20	**GL1 2620**
	30	30	**GL1 2630**
28	32	12	**GL1 2812**
	32	15	**GL1 2815**
	32	20	**GL1 2820**
	32	25	**GL1 2825**
	32	30	**GL1 2830**
	32	35	**GL1 2835**
30	34	12	**GL1 3012**
	34	15	**GL1 3015**
	34	20	**GL1 3020**
	34	25	**GL1 3025**
	34	30	**GL1 3030**
	34	35	**GL1 3035**
	34	40	**GL1 3040**
32	36	8	**GL1 3208**
	36	12	**GL1 3212**
	36	20	**GL1 3220**
	36	25	**GL1 3225**
	36	30	**GL1 3230**
	36	40	**GL1 3240**
36	40	40	**GL1 3640**


GL1 F

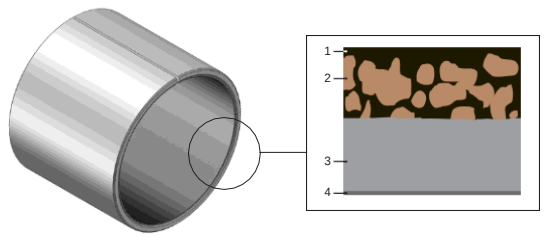
On request


GL1 SF

On request


GL1 P

Maintenance free rolled bushings



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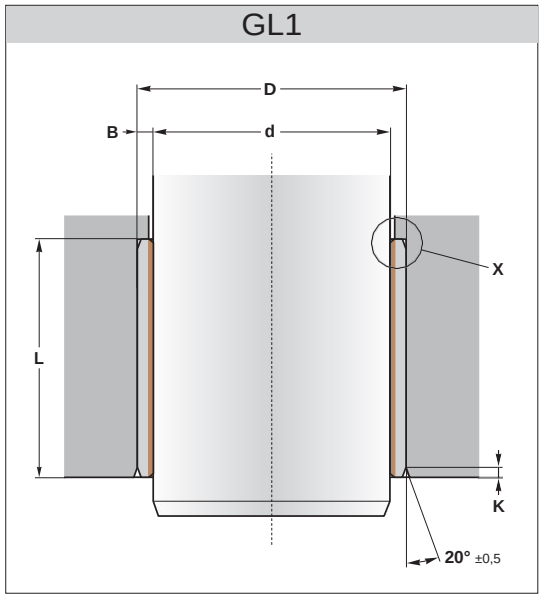
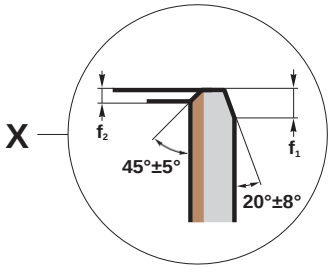
3 Steel roll
4 Surface protection: ~0,002 mm





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1	0,6	0,3
1,5	0,6	0,4
2	1,2	0,4
2,5	1,8	0,6

Tolerances			
	d	**D**	**L**
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4 < **d** < 80	f7	H7	
d ≥ 80	h8	H7	

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In hydrodynamic working	5 m/s
PV-factor	
Continuously	1,8 N/mm². m/s
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Shaft roughness	Ra < 0,4 µm
Shaft hardness	HB > 350

Advantages

For dry and maintenance-free applications
Absorption of noise and vibrations
Hydrodynamic applications possible
High loads
Good chemical resistance
Low wear and friction
No stick-slip
High temperature range
High sliding speed
No water absorption
Low clearance during operation
Limited dimensions

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0,025	250-140	< 0,001
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0,07-0,1	60-10	0,005-0,05
0,1-0,15	10-1	0,05-0,5
0,15-0,25	< 1	0,5-2

d	D	L	Reference
35	39	10	**GL1 3510**
	39	12	**GL1 3512**
	39	15	**GL1 3515**
	39	20	**GL1 3520**
	39	25	**GL1 3525**
	39	30	**GL1 3530**
	39	35	**GL1 3535**
	39	40	**GL1 3540**
	39	50	**GL1 3550**
38	42	20	**GL1 3820**
	42	40	**GL1 3840**
40	44	12	**GL1 4012**
	44	15	**GL1 4015**
	44	20	**GL1 4020**
	44	25	**GL1 4025**
	44	30	**GL1 4030**
	44	35	**GL1 4035**
	44	40	**GL1 4040**
	44	50	**GL1 4050**
45	50	20	**GL1 4520**
	50	25	**GL1 4525**
	50	30	**GL1 4530**
	50	35	**GL1 4535**
	50	40	**GL1 4540**
	50	45	**GL1 4545**
	50	50	**GL1 4550**
50	55	15	**GL1 5015**
	55	20	**GL1 5020**
	55	25	**GL1 5025**
	55	30	**GL1 5030**
	55	35	**GL1 5035**
	55	40	**GL1 5040**
	55	50	**GL1 5050**
	55	60	**GL1 5060**

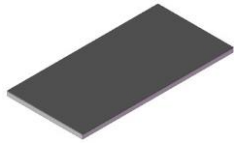
d	D	L	Reference
55	60	25	**GL1 5525**
	60	30	**GL1 5530**
	60	35	**GL1 5535**
	60	40	**GL1 5540**
	60	50	**GL1 5550**
	60	55	**GL1 5555**
	60	60	**GL1 5560**
56	61	40	**GL1 5640**
60	65	15	**GL1 6015**
	65	20	**GL1 6020**
	65	30	**GL1 6030**
	65	35	**GL1 6035**
	65	40	**GL1 6040**
	65	50	**GL1 6050**
	65	60	**GL1 6060**
	65	70	**GL1 6070**
65	70	15	**GL1 6515**
	70	30	**GL1 6530**
	70	40	**GL1 6540**
	70	50	**GL1 6550**
	70	60	**GL1 6560**
	70	70	**GL1 6570**
70	75	30	**GL1 7030**
	75	35	**GL1 7035**
	75	40	**GL1 7040**
	75	50	**GL1 7050**
	75	60	**GL1 7060**
	75	70	**GL1 7070**
	75	80	**GL1 7080**


GL1 F

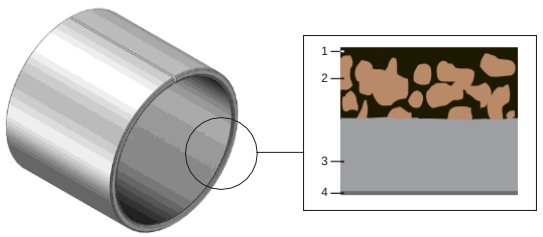
On request


GL1 SF

On request


GL1 P

Maintenance free rolled bushings



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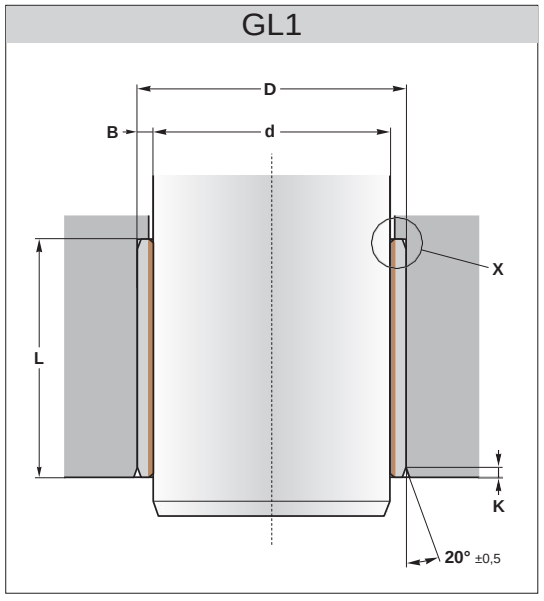

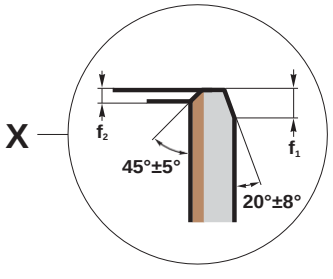

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0,1-0,15	10-1	0,05-0,5
0,15-0,25	< 1	0,5-2

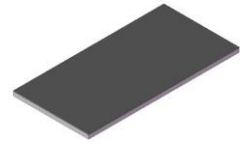
d	D	L	Reference
75	80	30	**GL1 7530**
	80	40	**GL1 7540**
	80	50	**GL1 7550**
	80	60	**GL1 7560**
	80	80	**GL1 7580**
80	85	40	**GL1 8040**
	85	50	**GL1 8050**
	85	60	**GL1 8060**
	85	80	**GL1 8080**
	85	100	**GL1 80100**
85	90	40	**GL1 8540**
	90	50	**GL1 8550**
	90	60	**GL1 8560**
90	95	40	**GL1 9040**
	95	50	**GL1 9050**
	95	60	**GL1 9060**
	95	78,5	**GL1 9078.5**
	95	90	**GL1 9090**
	95	100	**GL1 90100**
95	100	30	**GL1 9530**
	100	40	**GL1 9540**
100	105	50	**GL1 10050**
	105	60	**GL1 10060**
	105	70	**GL1 10070**
	105	95	**GL1 10095**
105	110	90	**GL1 10590**
	110	115	**GL1 105115**
110	115	50	**GL1 11050**
	115	60	**GL1 11060**
	115	100	**GL1 110100**
	115	110	**GL1 110110**
	115	115	**GL1 110115**

d	D	L	Reference
115	120	50	**GL1 11550**
120	125	35	**GL1 12035**
	125	45	**GL1 12045**
	125	50	**GL1 12050**
	125	60	**GL1 12060**
	125	70	**GL1 12070**
	125	95	**GL1 12095**
	125	100	**GL1 120100**
125	130	100	**GL1 125100**
130	135	50	**GL1 13050**
	135	60	**GL1 13060**
	135	80	**GL1 13080**
	135	100	**GL1 130100**
140	145	50	**GL1 14050**
	145	80	**GL1 14080**
	145	100	**GL1 140100**
150	155	50	**GL1 15050**
	155	60	**GL1 15060**
	155	80	**GL1 15080**
	155	100	**GL1 150100**
160	165	80	**GL1 16080**
	165	100	**GL1 160100**
180	185	100	**GL1 180100**
200	205	100	**GL1 200100**
250	255	100	**GL1 250100**
300	305	50	**GL1 30050**
	305	100	**GL1 300100**


GL1 F

On request

GL1 SF

On request

GL1 P